

Please amend the claims as follows:

**1. (Currently Amended)** An ion-assisted electron beam evaporation process,  
the process comprising the steps of:

- positioning multiple high yield fixtures in an array;
- adjusting a vertical position of each of the fixtures to compensate for variations in  
deposition rate versus chamber location;
- providing two electron guns;
- mounting the guns to a movable track;
- positioning the first gun at a source deposition location;
- rotating the fixtures at greater than 2400 rpm;
- performing ion assisted evaporation with the first gun, the second gun being kept  
in a stand-by location in pre-heat mode;
- ceasing deposition prior to achieving target thickness on each fixture by;
- shuttering each of the fixtures ~~at different times~~;
- independently reopening the fixtures to resume deposition at a low rate pulsed  
deposition to achieve the target thickness;
- closing ~~elam~~ shutters on the fixtures;
- moving the first gun to a stand-by position;
- moving the second gun to the source deposition location;
- sampling evaporation with a quartz crystal thickness monitor;
- opening a shutter on the second gun;

performing ion assisted evaporation with the second gun, the first gun being kept in a stand-by location in pre-heat mode;

ceasing deposition prior to achieving target thickness on each fixture by;  
shuttering each of the fixtures ~~at different times~~;

independently reopening the fixtures to resume deposition at a low rate pulsed deposition to achieve the target thickness;

closing ~~clam~~ shutters on the fixtures; and

repeating the process until desired filter is obtained.

**2. (Currently Amended)** A method for producing an optical filter utilizing line-of-sight deposition, the method comprising the steps of:

providing multiple substrates;

providing a fixed ion source;

providing at least one selectively movable evaporator, the evaporator being positionable at a source deposition location and at a stand-by location spaced from the ion source a distance greater than the distance the source deposition location is spaced from the ion source;

positioning the at least one evaporator at a the source deposition location; and,  
depositing material onto the substrates.

**3. (Original)** The method of Claim 2, wherein the method further comprises the step of:

shuttering the substrates as necessary to ensure uniform deposition on the substrates.

4. **(Original)** The method of Claim 3, where in the method further comprises the step of:

rotating the substrates at approximately greater than 500 revolutions per minute.

5. **(Currently Amended)** The method of Claim 4, wherein shuttering the substrates as necessary to ensure uniform deposition on the substrates comprises the steps of:

ceasing deposition of a layer prior to achieving target thickness; by shuttering the substrates ~~at different times~~;

independently unshuttering the substrates to resume deposition; and,

achieving the target thickness.

6. **(Currently Amended)** The method of Claim 2, wherein the at least one evaporator is at least two selectively movable evaporators, the method further comprising the steps of:

moving the first evaporator to a the stand-by position;

opening a shutter on the second evaporator;

positioning the second evaporator at the source deposition location; and,

performing ion assisted evaporation with the second evaporator.

7. **(Currently Amended)** The method of Claim 6, wherein the method further comprises the steps of:

ceasing deposition of a layer prior to achieving target thickness; by shuttering the substrates ~~at different times~~;

independently unshuttering the substrates to resume deposition; and,

achieving the target thickness.

**8. (Original)** The method of Claim 7, wherein after moving the second evaporator into the source deposition location, the method comprises the step of:  
sampling evaporation with a quartz crystal thickness monitor.

**9. (Original)** The method of Claim 8, wherein the method further comprises the steps of:  
closing clam shutters on the substrates; and,  
repeating the process until desired filter is obtained.

**10. (Original)** The method of Claim 9, wherein providing multiple substrates comprises the step of:  
providing a dense high yield fixture array having multiple, independently shutterable fixtures, each of the fixtures containing multiple substrates.

**11. (Previously Amended)** A system for producing optical filters using line-of-sight deposition, the system comprising:  
multiple substrates;  
an ion source;  
a source deposition location;  
a standby location spaced from the ion source a distance greater than the distance said source deposition location is spaced from the ion source; and  
at least one selectively movable evaporator said evaporator being positionable at said source deposition location and at said stand-by location.

12. **(Original)** The system of Claim 11, wherein the system further comprises: shuttering means for shuttering the substrates; and, a vacuum chamber.
13. **(Original)** The system of Claim 12, wherein the substrates are rotated at approximately greater than 500 revolutions per minute.
14. **(Original)** The system of Claim 13, wherein the substrates are attached to high yield fixtures, the fixtures being independently shutterable.
15. **(Original)** The system of Claim 14, wherein the fixtures rotate and are adjustable.
16. **(Original)** The system of Claim 15, wherein the system further comprises: a quartz crystal thickness monitor.
17. **(Original)** The system of Claim 16, wherein the evaporators are connected to a movable track, the movable track being opposite the fixtures in the vacuum chamber.
18. **(Original)** The system of Claim 17, wherein the vacuum chamber is approximately 60 inches by 80 inches.
19. **(Currently Amended)** An optical filter produced by the method of Claim ~~2~~ 6.
20. **(Original)** The method of Claim 4, wherein rotating the substrates at greater than 500 revolutions per minute comprises the step of:  
rotating the substrates at greater than 2400 revolutions per minute.
21. **(Original)** The system of Claim 13, wherein the substrates are rotated at greater than 2400 revolutions per minute.

**22. (Previously Presented)** The system of Claim 11, wherein the system comprises at least two selectively movable evaporators.

**23. (New)** A method of making an optical filter by ion assisted deposition comprising the steps of:

- mounting one or more substrates in a deposition chamber;
- mounting an ion source within the chamber
- positioning a first evaporator at a source deposition position located within the chamber proximate the ion source;
- positioning a second evaporator at a standby position located within the chamber remote from the ion source;
- depositing a first material from the first evaporator on the one or more substrates;
- ceasing deposition of the first material;
- positioning the first evaporator at a standby position within the chamber remote from the ion source;
- positioning the second evaporator at the source deposition position;
- depositing a second material from the second evaporator on the one or more substrates; and
- ceasing deposition of the second material.

**24. (New)** A method of making an optical filter by ion assisted deposition comprising the steps of;

- exposing one or more substrates to a first evaporator positioned at a source deposition location;

shielding the one or more substrates from a second evaporator positioned at a standby location laterally spaced from the source deposition location;

depositing a layer of a first material on the one or more substrates;

exposing the one or more substrates to the second evaporator positioned at the source deposition location;

shielding the one or more substrates from the first evaporator positioned at the standby location; and

depositing a layer of second material on the one or more substrates.